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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,334	05/04/2006	Kyung-Goo Kang	1599-0326PUS1	5694

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EXAMINER
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NGUYEN, THUY-AI N

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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06/01/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,334	<b>Applicant(s)</b> KANG ET AL.	
	<b>Examiner</b> THUY-AI N. NGUYEN	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1- 20 and 22- 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1- 20 and 22- 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 21, 2009 has been entered.

Claim 21 is cancelled. Claims 1 and 22 have been amended. Claims 1- 20 and 22- 26 are pending.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 5, 7, 9- 10, 12- 20, and 22 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570).

Regarding claim 1, Vogt et al. teach the microemulsion composition obtained from the diluting gel composition with water (claim 36) comprising metalaxyl (col. 3: 43-48), wherein the gel composition comprises polyoxyalkylene tristyrylphenyl ether

Art Unit: 1796

(tristyrenephenol ethoxylate (col. 2: 1-5), calcium salt of alkylbenzene sulfonate, and solvents including lactone (col. 2: 1- 67), water miscible solvents including glycol, ethanol, pyrrolidone, and amide (i.e. dimethylacetamide and dimethylformamide) (col. 3: 1- 13). The composition further comprises other nonionic surfactants or emulsifiers including castor oil ethoxylate and alcohol ethoxylate (col. 1: 60 – col. 2: 5), which do not materially affect the basic and novel characteristic of the claimed invention which are not excluded from the claim (*In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976), MPEP 2111.03 [R-3]).

Vogt et al. teach the microemulsion composition formed by diluting the gel composition (abstract) with water (see claims 36 and 39, col. 8). It is commonly known that the amount of water to make microemulsion composition is greater than that needed to make a gel. Vogt et al. do not specifically teach the amount of water being added to form the microemulsion composition. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of water being added to the composition within the range as said by the applicant to achieve the desired microemulsion composition. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

Regarding claims 2- 4, Vogt et al. teach the microemulsion composition comprising the anionic form of polyoxyalkylene tristyrylphenyl ether (salt of tristyrenephenol ethoxylate), wherein the salt of the ethoxylate polyoxyalkylene contains from 8 to 30 moles of ethylene oxide (col. 2: 1- 12).

Regarding claim 5, Vogt et al. teach the composition, wherein the calcium salt of alkylbenzene sulfonic acid is the calcium salt of dodecylbenzene sulfonate (col. 2: 29- 34).

Regarding claim 7, see rejection of claim 1.

Regarding claims 9 - 10, Vogt et al. teach the composition, wherein the aqueous solvent are ethyleneglycol, ethanol, methyl-2-pyrrolidone, N,N- dimethylacetamide, and N,N- dimethylformamide (col. 3: 5- 13).

Regarding claims 12- 14, Vogt et al. teach the composition, wherein the pesticide (including the metalaxyl, col. 3: 14- 45) is present in an amount of from 10 to 90 percent weight relation to the volume of the composition ( col. 4: 23- 28), which is equivalent to 10 to 90 percent by weight of the composition.

Regarding claims 15- 17, Vogt et al. teach the composition, wherein the aqueous solvent (or organic solvent, including water soluble solvent (col. 2: 54- col. 3: 13) is present in an amount of from 1 to 96 percent of the composition (col. 4: 28- 30).

Regarding claim 18- 20, Vogt et al. teach the composition, wherein the amount of emulsifier (surfactants) is from 3 to 80 percent of the composition (col. 4: 30- 35).

Regarding claim 22, see the rejection of claim 1.

Regarding claim 23, Vogt et al. teach the composition as described above. Vogt et al. teach the composition comprising no pigment (dye) that meets 0 percent of pigment as recited by the applicant.

Regarding claim 24, Vogt et al. teach the microemulsion composition prepared by diluting with water (col. 8, claim 36).

Regarding claim 25, Vogt et al. teach the method for controlling plant disease by diluting the composition as described above with water and applying an effective amount of the dilution to the plant (col. 4: 58- 67).

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claim 1 above in view of Flahive (US. 5,965,487).

Regarding claims 6, and 8, Vogt et al. teach the composition as described above. However, Vogt et al. do not teach the composition comprising dialkylsuccinic acid. Flahive teaches the herbicidal composition comprising sodium di-2-ethylhexyl sulfosuccinate, and dodecylbenzenesulfonate. Vogt et al. and Flahive are analogous arts because they are in the same field of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use sodium di-2-ethylhexyl sulfosuccinate, and dodecylbenzenesulfonate in the teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5- 30).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claims 1, 9, and 10 above, in view of Flahive (US. 5,965,487).

Regarding claim 11, Vogt et al. teach the composition as described above. However, Vogt et al. do not teach the composition comprising propylene glycol. Flahive teaches the herbicidal composition comprising propylene glycol. Vogt et al. and Flahive are analogous arts because they are in the same filed of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use propylene glycol in the teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5- 30).

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claim 1 above in view of Flahive (US. 5,965,487).

Regarding claim 26, Vogt et al. teach the composition as described in claim 1, wherein the surfactants or emulsifiers include polyoxyalkylene tristyrylphenyl ether (tristyrenephenol ethoxylate (col. 2: 1-5) and calcium salt of alkylbenzene sulfonate (col. 2: 1- 67 ). However, Vogt et al. do not teach the composition comprising dialkylsuccinic acid. Flahive teaches the herbicidal composition comprising sodium di-2-ethylhexyl sulfosuccinate. Vogt et al. and Flahive are analogous arts because they are in the same filed of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to add sodium di-2-ethylhexyl

Art Unit: 1796

sulfosuccinate in the teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5-30).

### ***Response to Arguments***

Applicant's arguments of the rejections of claims 1- 20 and 22 - 26 filed on April 21, 2009 have been fully considered but they are not persuasive.

Applicant argues that Vogt and the present invention are different that Vogt discloses a composition comprising mixture of both water immiscible and water miscible solvent or water immiscible solvent while present invention composition comprises aqueous solvents only. Because the claim is written as an "opened" claim, and do not exclude the water immiscible solvent of Vogt et al., the claim is unpatentable over Vogt.

Second, Vogt et al. also disclose microemulsion composition is obtained from diluting the gel composition with water (col. 8: claim 36) which meet the microemulsion composition of the invention.

Third, although Vogt et al. disclose some different surfactants in addition to the surfactants said in the claim, the present invention is not patentably distinguishable from Vogt et al. because Vogt et al. encompass all surfactants as said in the claim.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is



Art Unit: 1796

(571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796

THA